Pay-Per-View Message Format

BINARY	HEXADECIMAL	COMMAND/ FUNCTION
0001 0000	10	"0"
0001 0001	11	"1"
0001 0010	12	"2"
0001 0011	13	"3"
0001 0100	14	"4"
0001 0101	15	"5"
0001 0110	16	"6"
0001 0111	17	"7"
0001 1000	18	"8"
0001 1001	19	"9"
0001 1010	1A	ENTER
0001 1011	1B	BUY/PURCHASE
0001 1100	1C	PIN DELIMITER
0001 1101	1D	CANCEL
0001 1110	1E	STOP
0001 1111	1F	START

DEFINITIONS

ENTER - Key pad entry that denotes end of numeric sequence

BUY/PURCHASE - Confirms pay-per-view transaction

PIN DELIMITER - Denotes start and/or end of Personal Identification Number (PIN)

CANCEL - Cancels entry and/or total transaction

STOP - Denotes completion of transaction(s)

START - Denotes initiation of transaction(s)

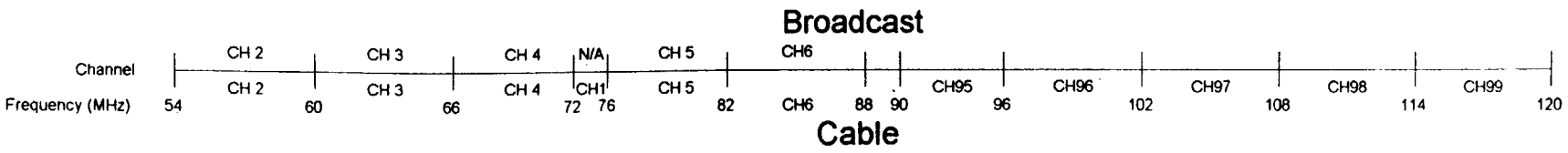
APPENDIX C

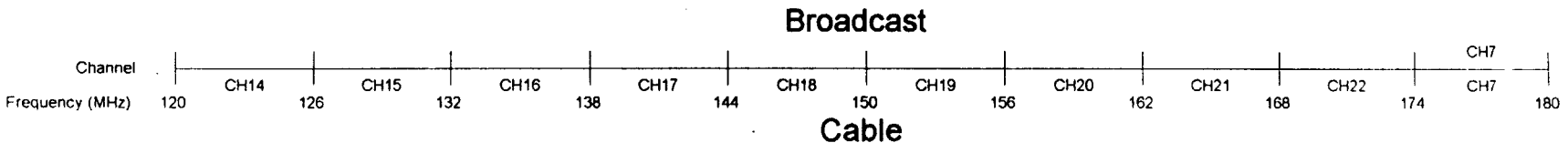
Connector
Pin-Out

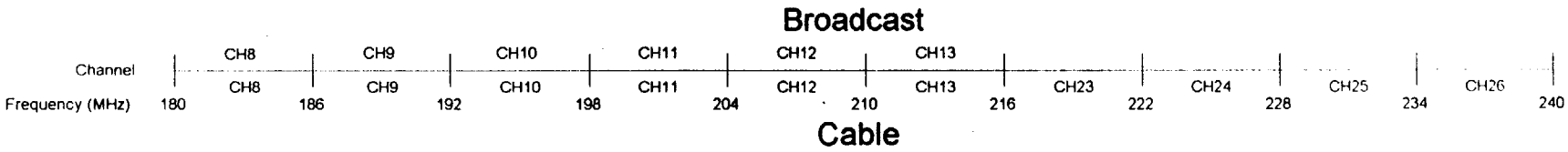
AUDIO SELECT FUNCTION	1			
		2		AUDIO INPUT (LEFT)
AGC TIME CONSTANT	3			
		4		AUDIO GROUND
SECOND AUDIO PROGRAM SELECT LINE	5			
		6		AUDIO INPUT (RIGHT)
B-Y	7			
		8		AUDIO OUTPUT
VIDEO FORMAT	9			
		10		PERIPHERAL COMMUNICATIONS
LUMINANCE (Y) INPUT	11			
		12		RESERVED
FB/CHROMA GROUND	13			
		14		CHANNEL CHANGE AND POWER INDICATOR
R-Y	15			
		16		FAST BLANKING/ CHROMA INPUT
VIDEO GROUND	17			
		18		DECODER PRESENT AND DRS
RECEIVER VIDEO	19			
		20		PERIPHERAL VIDEO
SHIELD				

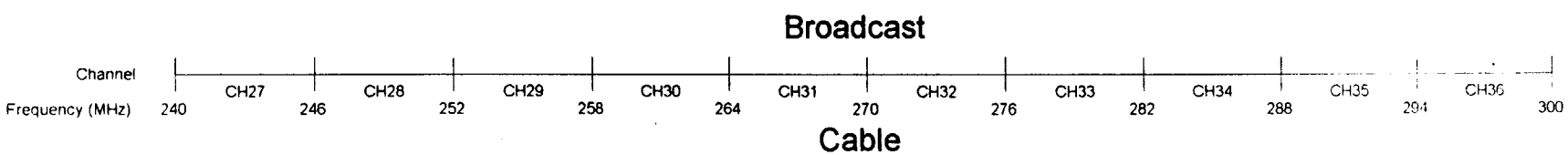

ELECTRONIC INDUSTRIES
EIA
EST. 1924
ASSOCIATION

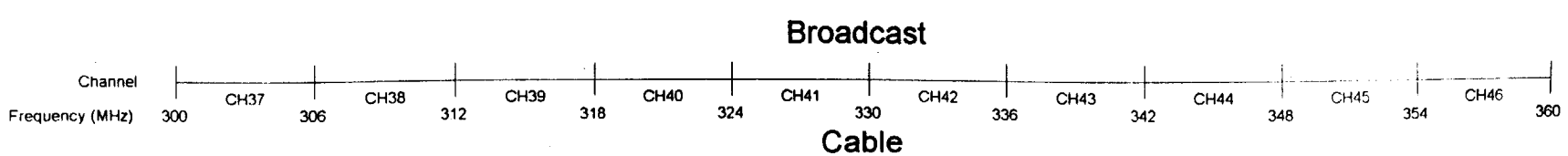
APPENDIX G: COMPARISON OF BROADCAST CHANNELS AND CABLE CHANNELS OF EIA IS-6

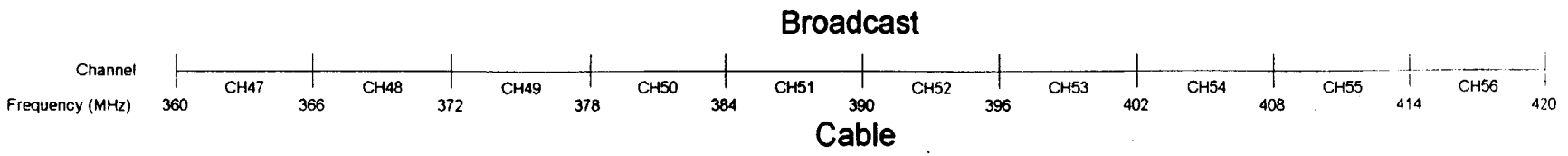

Broadcast
Channel
CH 2
CH 3
CH 4
N/A
CH 5
CH6
Frequency (MHz)
54
60
66
72
76
82
88
90
96
102
108
114
120
CH 2
CH 3
CH 4
CH1
CH 5
CH6
CH95
CH96
CH97
CH98
CH99
Cable

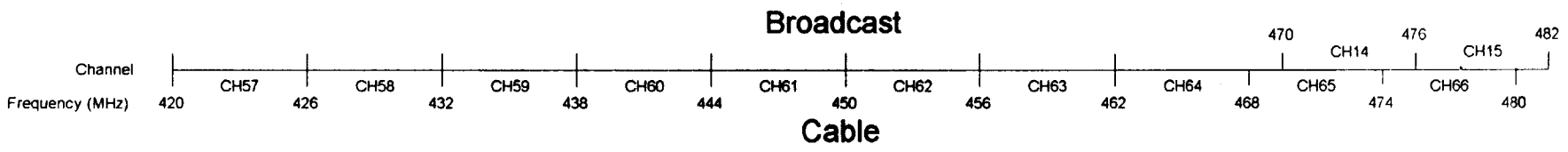

Broadcast
Channel
CH14
CH15
CH16
CH17
CH18
CH19
CH20
CH21
CH22
CH7
Frequency (MHz)
120
126
132
138
144
150
156
162
168
174
180
CH7
Cable

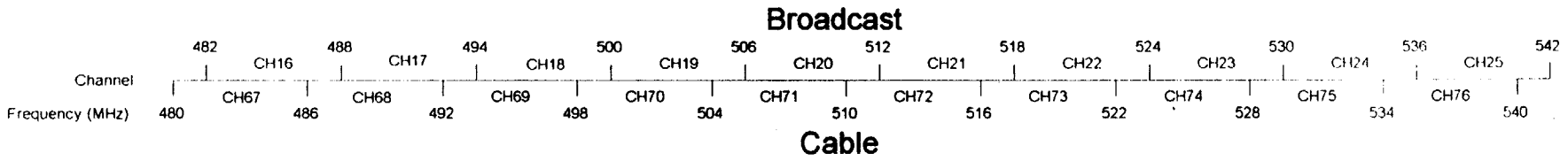

Broadcast
Channel
CH8
CH9
CH10
CH11
CH12
CH13
Frequency (MHz)
180
186
192
198
204
210
216
222
228
234
240
CH8
CH9
CH10
CH11
CH12
CH13
CH23
CH24
CH25
CH26
Cable

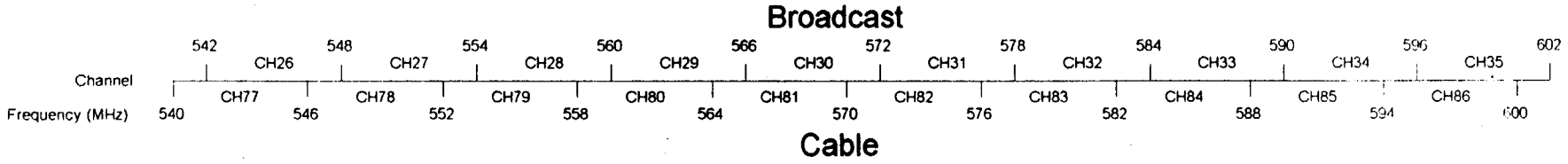

Broadcast
Channel
CH27
CH28
CH29
CH30
CH31
CH32
CH33
CH34
CH35
CH36
Frequency (MHz)
240
246
252
258
264
270
276
282
288
294
300
Cable

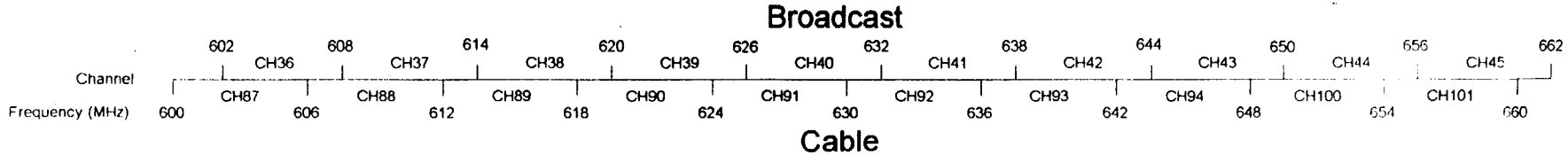

Broadcast
Channel
CH37
CH38
CH39
CH40
CH41
CH42
CH43
CH44
CH45
CH46
Frequency (MHz)
300
306
312
318
324
330
336
342
348
354
360
Cable

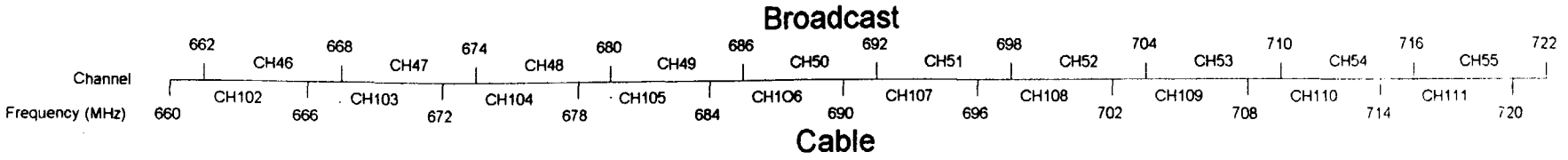

Broadcast
Channel
CH47 CH48 CH49 CH50 CH51 CH52 CH53 CH54 CH55 CH56
Frequency (MHz)
360 366 372 378 384 390 396 402 408 414 420
Cable

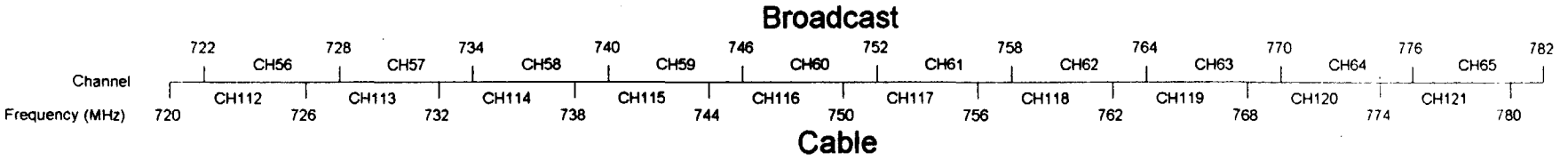

Broadcast
Channel
CH57 CH58 CH59 CH60 CH61 CH62 CH63 CH64 CH65 CH66
CH14 CH15
Frequency (MHz)
420 426 432 438 444 450 456 462 468 474 480
470 476 482
Cable

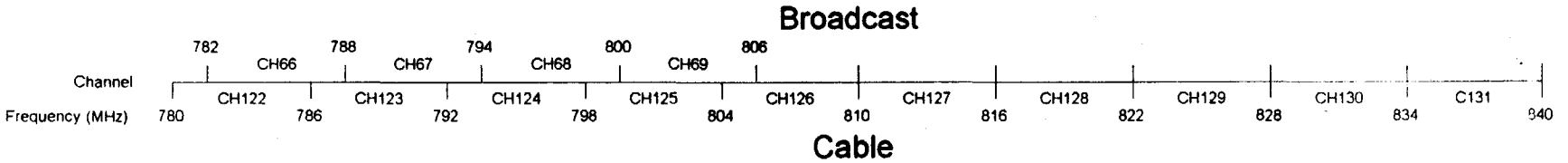

Broadcast
Channel
CH16 CH17 CH18 CH19 CH20 CH21 CH22 CH23 CH24 CH25
CH67 CH68 CH69 CH70 CH71 CH72 CH73 CH74 CH75 CH76
Frequency (MHz)
480 486 492 498 504 510 516 522 528 534 540
482 488 494 500 506 512 518 524 530 536 542
Cable

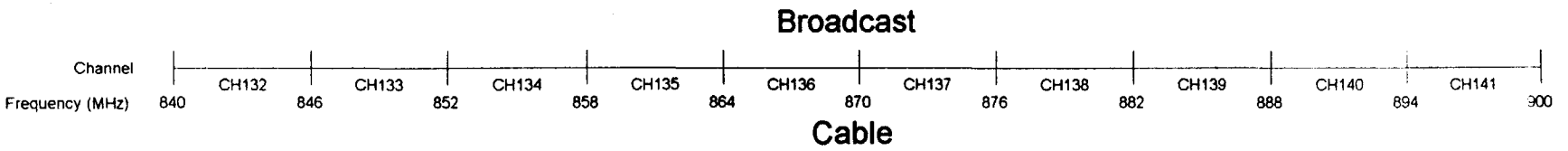

Broadcast
Channel
CH26 CH27 CH28 CH29 CH30 CH31 CH32 CH33 CH34 CH35
CH77 CH78 CH79 CH80 CH81 CH82 CH83 CH84 CH85 CH86
Frequency (MHz)
540 546 552 558 564 570 576 582 588 594 600
542 548 554 560 566 572 578 584 590 596 602
Cable

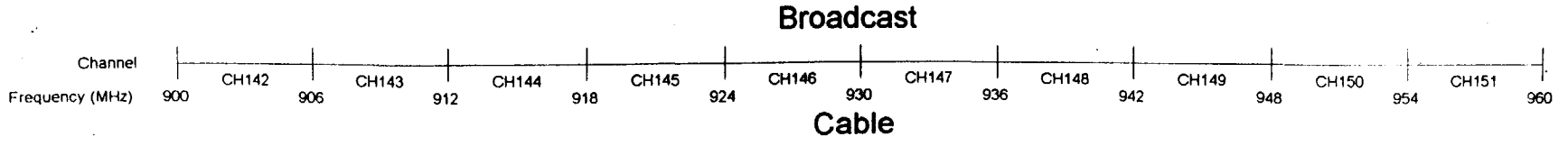

Broadcast
Channel
CH36 CH37 CH38 CH39 CH40 CH41 CH42 CH43 CH44 CH45
CH87 CH88 CH89 CH90 CH91 CH92 CH93 CH94 CH100 CH101
Frequency (MHz)
600 606 612 618 624 630 636 642 648 654 660
602 608 614 620 626 632 638 644 650 656 662
Cable

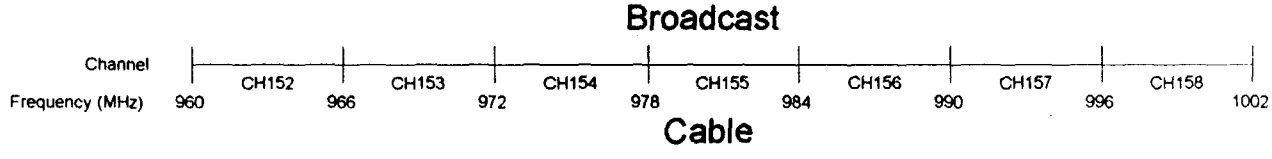

Broadcast
Channel
Frequency (MHz)
662 668 674 680 686 692 698 704 710 716 722
CH46 CH47 CH48 CH49 CH50 CH51 CH52 CH53 CH54 CH55
CH102 CH103 CH104 CH105 CH1O6 CH107 CH108 CH109 CH110 CH111
660 666 672 678 684 690 696 702 708 714 720
Cable


Broadcast
Channel
Frequency (MHz)
722 728 734 740 746 752 758 764 770 776 782
CH56 CH57 CH58 CH59 CH60 CH61 CH62 CH63 CH64 CH65
CH112 CH113 CH114 CH115 CH116 CH117 CH118 CH119 CH120 CH121
720 726 732 738 744 750 756 762 768 774 780
Cable


Broadcast
Channel
Frequency (MHz)
782 788 794 800 806
CH66 CH67 CH68 CH69
CH122 CH123 CH124 CH125 CH126 CH127 CH128 CH129 CH130 C131
780 786 792 798 804 810 816 822 828 834 940
Cable


Broadcast
Channel
Frequency (MHz)
CH132 CH133 CH134 CH135 CH136 CH137 CH138 CH139 CH140 CH141
840 846 852 858 864 870 876 882 888 894 900
Cable


Broadcast
Channel
Frequency (MHz)
CH142 CH143 CH144 CH145 CH146 CH147 CH148 CH149 CH150 CH151
900 906 912 918 924 930 936 942 948 954 960
Cable


Broadcast
Channel
CH152
CH153
CH154
CH155
CH156
CH157
CH158
Frequency (MHz)
960
966
972
978
984
990
996
1002
Cable

APPENDIX H: EIA/ANSI 563 STANDARD

Attachment 1

EIA IS-6

EIA INTERIM STANDARD

JOINT EIA/NCTA
RECOMMENDED CABLE TELEVISION
CHANNEL IDENTIFICATION PLAN

IS-6 (CP)

(Consumer Products)

MAY 1983

Engineering Department

ELECTRONIC INDUSTRIES ASSOCIATION

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Interim Standard No. 6 Cable Television Channel Identification Plan

Dissenting Statement

Zenith continues to view it as unwise to provide CATV television channel designations within the FM band (88 - 108 mHz) in the Channelization Plan, even with the cautions of paragraph 2.6 to CATV operators.

The simple fact of the existence of these channels with numbers in the prime numbering sequence 0-99 remains an open invitation to operators to use them for program delivery to the home. Such use would be a direct incompatibility with many manufacturers' stated need and intent to continue the use of FM traps in the CATV compatible television receivers which the standard is intended to foster.

We believe it is in the best interest of both the cable operator and the manufacturer to foreclose this circumstance and we urge that the matter be reviewed as part of the interim standard evaluation process.

The Channelization Plan is intended to provide the basis for future compatibility between CATV systems and television receivers in delivery of consumer-directed television programming. It will not retrofit existing systems and does not pretend to be a comprehensive allocation of the Cable Spectrum. There is no compulsion to include 88-108 mHz when one states, as does the plan, that this band should not be used to serve the consumer. Further, if the channels in the FM band are not intended for consumer service, it is inappropriate and misleading to include these channels in the channel capacity statement to the consumer, paragraph 2.7.

INTERIM STANDARD NO. 6 -- RECOMMENDED CABLE TELEVISION IDENTIFICATION PLAN

DISSENTING STATEMENT

GENERAL ELECTRIC IS COMMITTED TO PRODUCING AND DISTRIBUTING TELEVISION AND VIDEO PRODUCTS WHICH PROVIDE CUSTOMER SATISFACTION UNDER A WIDE VARIETY OF OPERATING CONDITIONS. CONSEQUENTLY, FM REJECTION TRAPS ARE INCORPORTED INTO MOST PRODUCTS AS AN INTEGRAL PART OF THE TUNER.

ACCORDINGLY, WE PETITION THAT THE FOLLOWING BE CONSIDERED DURING THE REVIEW PROCESS WHICH WILL PRECEED THE ISSUANCE OF THE PERMANENT STANDARD:

A) SECTION 2.6 (CHANNEL PRIORITY): EXPAND THE EXCLUDED CATV USAGE FOR THE BROADCAST FM SPECTRUM (SEE SUBPART 3) TO INCLUDE ALL TRANSMITTED MATERIAL WHICH WOULD CUSTOMARILY INVOLVE THE SUBSCRIBER'S TELEVISION RECEIVER, OR EQUIVALENT, E.G., FULL-FIELD TELETEXT.

B) SECTION 2.7 (CHANNEL CAPACITY): EXCLUDE THOSE CHANNELS WHICH FALL WITHIN THE BROADCAST FM BAND FROM THE CHANNEL COUNT NUMBER "N". THIS CHANGE IS LOGICALLY CONSISTANT WITH THE INTENT OF SECTION 2.6 (CHANNEL PRIORITY), SUBPART 3. THE INVOLVED, AND EXCLUDED CHANNELS, ARE NUMBERED 95 - 97 IN THE STANDARD.

F.R. STACHOWIAK 4-26-83
GENERAL ELECTRIC COMPANY

EIA INTERIM STANDARD No. 6

RECOMMENDED CABLE TELEVISION CHANNEL IDENTIFICATION PLAN

Prepared by:

EIA/NCTA Joint Engineering Committee
Channelization Working Group

EIA INTERIM STANDARD No. 6

RECOMMENDED CABLE TELEVISION CHANNEL IDENTIFICATION PLAN

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EIA INTERIM STANDARD NO. 6 (CP)

RECOMMENDED CABLE TELEVISION CHANNEL IDENTIFICATION PLAN

1.0 INTRODUCTION

In January of 1982 the Electronic Industries Association (EIA) and the National Cable Television Association (NCTA) formed a Joint Engineering Committee to make an assessment of the problems related to the compatibility of cable hardware and television receivers, with emphasis on the technical and operational issues at stake. The charter of the committee is "To establish and maintain dialogue between the cable and consumer electronics industries for the purpose of studying and resolving engineering matters of common interest."

The main concern of the EIA/NCTA Joint Engineering Committee is communications, cooperation and, where necessary, the generation of guidelines to steer development of cable television services and consumer equipment into the future, in a way which will facilitate adaptation to new services and techniques.

It is important to recognize that there is no disagreement on the need to achieve certain minimum levels of compatibility. Both the system operator and receiver manufacturers are interested in satisfying their customer needs. The problem lies in determining those needs and then ensuring that most of them are met without undue disruption to the needs of others. Orderly development by both parties requires compatibility between the television receiver and the cable systems, which can be achieved through the EIA/NCTA Joint Engineering Committee's efforts in defining interfaces.

2.0 CHANNEL IDENTIFICATION PLAN

2.1 Definitions of Terms - General

Note: Within the scope of this Plan, the following definitions shall apply.

2.1.1 Standard Frequencies

This is a cable transmission system that transmits on the standard off-air frequencies for the channels 2-6 and 7-13. Supplemental channels are in 6 MHz increments down from channel 7 (175.25 MHz) to 91.25 MHz (channels 14-22 and 95-99) and upwards from channel 13 (211.25 MHz).

2.1.2 Harmonic Related Carriers

This is a cable transmission system that transmits on picture carrier frequencies that are multiples of 6MHz and starts at 54 MHz. It involves frequency displacements of -1.25 MHz on all standard and supplementary channels except channels 5 and 6, where the displacement is +0.75 MHz.

2.1.3 Incremental Related Carriers

This is a cable transmission system that transmits on picture carrier frequencies starting at 55.25 MHz and increments each channel by 6 MHz. The result is the same as Standard Frequencies with the exception of the channels between 67.25 MHz and 91.25 MHz.

2.2 Numbering

The numbers 1 through 99 designate the channels on a CATV cable, and the channel selected. The single digit channel numbers may be designated by a preceeding zero if desired (i.e., 7 or 07). The manner by which multiple cables are accomodated is undefined by this Plan.

2.3 Frequency Assignments

This Plan defines Standard, IRC and HRC channels as depicted in Table 1 and Table 2.

2.4 Frequency Tolerances

The maximum allowable frequency offset for any channel shall be ± 300 kHz of the nominal frequency. Furthermore, the spacing between adjacent picture carriers shall be 6 ± .125 MHz.

2.5 Minimum Number of Channels

The minimum number of channels, for compliance with this Plan shall be 35 (channel numbers 2-36).

2.6 Channel Priority

* Channel 1 shall be implemented after channels 2-53.

* Once the channels 1-65 are implemented, channels 98-99 must be implemented. Inclusion of channels 98-99 in devices with fewer than the above 65 channels is optional. Channels 98-99 will be implemented jointly.

* Cable channels 95-97 having HRC picture carrier frequencies of 90.0, 96.0 and 102.0 MHz and IRC and

Standard picture carrier frequencies of 91.25, 97.25 and 103.25 MHz are being named in this plan to complete the available spectrum. Compliance with this Channel Identification Plan does not require that these channels be included. Therefore, utilization of these channels by a cable system is on a voluntary basis and recommended signal carriage is for services other than those involving transmission of a picture (standard or scrambled) to a customer. Many television receivers currently on the market and compatible units to be produced in the near future contain traps to attenuate the FM band, thereby greatly reducing a source of crossmodulation and intermodulation interference to TV. Inclusion of these traps inhibits the reception of these channels.

2.7 Channel Capacity

In compliance with this Plan, the number of cable channels capable of being received shall be indicated as N(C) where N indicates the total number of channels, and C indicates the channel numbers.

Examples: 52(2-51,98,99)

52(2-53)

55(1-55)

75(1-73,98,99)

Table 1

CHANNEL IDENTIFICATION PLAN

(By Channel Designation)

Channel Designation	Pix Carrier Frequency (MHz)			Historical Reference
	Std.	HRC	IRC	
1,01	*	72.00	73.25	4+,A-8
2,02	55.25	54.00	55.25	
3,03	61.25	60.00	61.25	
4,04	67.25	66.00	67.25	
5,05	77.25	78.00	79.25	A-7(HRC,IRC)
6,06	83.25	84.00	85.25	A-6(HRC,IRC)
7,07	175.25	174.00	175.25	
.	.	.	.	
.	.	.	.	
.	.	.	.	
13	211.25	210.00	211.25	
14	121.25	120.00	121.25	A
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
22	169.25	168.00	169.25	I
23	217.25	216.00	217.25	J
.	.	.	.	.
.	.	.	.	.
30	259.25	258.00	259.25	Q
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
40	319.25	318.00	319.25	DD
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
50	379.25	378.00	379.25	NN
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
60	439.25	438.00	439.25	XX
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
70	499.25	498.00	499.25	
.	.	.	.	
.	.	.	.	
.	.	.	.	

* Undesignated

Table 1 (Cont)

CHANNEL IDENTIFICATION PLAN

(By Channel Designation)

Channel Designation	Pix Carrier Frequency (MHz)			Historical Reference
	Std.	HRC	IRC	
80	559.25	558.00	559.25	
.	.	.	.	
.	.	.	.	
.	.	.	.	
90	619.25	618.00	619.25	
.	.	.	.	
.	.	.	.	
.	.	.	.	
94	643.25	642.00	643.25	
95	91.25	90.00	91.25	A-5
96	97.25	96.00	97.25	A-4
97	103.25	102.00	103.25	A-3
98	109.25	108.00	109.25	A-2
99	115.25	114.00	115.25	A-1

Table 2

CHANNEL IDENTIFICATION PLAN

(By Frequency Assignments)

Pix Carrier Frequency (MHz)			Channel Designation	Historical Reference
Std.	HRC	IRC		
55.25	54.00	55.25	2	
61.25	60.00	61.25	3	
67.25	66.00	67.25	4	
*	72.00	73.25	1	4+,A-8
77.25	78.00	79.25	5	A-7(HRC,IRC)
83.25	84.00	85.25	6?	A-6(HRC,IRC)
91.25	90.00	91.25	95	A-5
97.25	96.00	97.25	96	A-4
103.25	102.00	103.25	97	A-3
109.25	108.00	109.25	98	A-2
115.25	114.00	115.25	99	A-1
121.25	120.00	121.25	14	A
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
169.25	168.00	169.25	22	I
175.25	174.00	175.25	7	
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
211.25	210.00	211.25	13	
217.25	216.00	217.25	23	J
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
295.25	294.00	295.25	36	W
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
325.25	324.00	325.25	41	EE
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
397.25	396.00	397.25	53	QQ
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.

*Undesignated